#### CHAPTER 7 - BUILDING CODE AND ADAAG REVIEWS

#### 1.0 General Information

- 1.1 Kansas State Fire Marshal Office (KSFMO) and the Division of Facilities Management (DFM) have a memorandum of understanding. DFM will act as single point of contact and will coordinate with KSFM, the reviews and acceptance of code footprints for all construction projects on State property. DFM and KSFMO will both sign code footprints. DFM, acting on behalf of KSFMO, will perform reviews of fire alarm plans and sprinkler plans for all construction projects on State property.
- 1.2 Each construction project will be reviewed by DFM for compliance to the building codes and the Americans with Disabilities Act Accessibility Guidelines (ADAAG). The Uniform Federal Accessibility Standards (UFAS) will be used when applicable.
- 1.3 Effective dates of applicable building codes are available on the DFM website (reference List of Applicable Codes). Project architect/engineers that contract with Department of Administration shall follow the applicable codes attached to their contract.
- 1.4 Questions regarding the building code or requests for building code interpretations are to be forwarded to DFM in a written format utilizing the Request for DFM Review form. The form is available on Facilities Planning web site (http://www.da.ks.gov/fp/). DFM will issue a written response.
- 1.5 Code footprints are required to be submitted for all new construction, new addition, building renovation/remodeling affecting active or passive life safety systems or change in occupancy of buildings on State property. (KAR 22-1-7) Code footprints submitted for Plan of Correction will be forwarded to KSFMO for their action. KSFMO is single point contact for Plan of Correction.
- 1.6 Code footprints can be submitted at any time during design and documents. These in-progress submittals of code footprints will be reviewed and comments provided. DFM will not provide acceptance of in-progress code footprint submittals, only review comments will be issued. A Request for DFM Review form is to accompany all submittals. The form is available on Facilities Planning web site (http://www.da.ks.gov/fp/). Documents will not be reviewed if form is not provided. See Section 2.0 for procedures.
- 1.7 For projects that are being bid by DFM, a final code footprint must have a Project Acceptance Record signed and issued by DFM to the project architect/engineer and agency prior to bidding. Failure to have a signed accepted Project Acceptance Record when the documents are scheduled for release to bid will prevent the project being released to bid.
- 1.8 For all other projects, final code footprints are required to have a Project Acceptance Record signed and issued by DFM to the project architect/engineer and agency prior to commencement of construction.
- 1.9 Final Construction Documents shall be submitted to DFM for review for compliance to the accepted code footprint and building codes. [K.S.A. 31-150] A Request for DFM Review form shall accompany the documents. The form is available on Facilities Planning web site (http://www.da.ks.gov/fp/). Documents will not be reviewed if form is not provided.
- 1.10 Fire alarm and/or sprinkler shop drawings are required to be submitted to DFM for review and acceptance. See Section 3.0 for procedures.
- 1.11 Certificate of (Partial) Occupancy will be issued by DFM prior to occupancy of any portion of a building that has been in construction or has a change in occupancy.

## 2.0 Code Footprint Reviews

- 2.1 Each project architect/engineer is responsible to submit a code footprint for review and acceptance by DFM. Code footprints shall be sent to DFM. The code footprint should <u>not</u> be sent to KSFMO. Misdirected and/or incomplete submittals may delay review process.
- 2.2 Design development submittals and 100% construction document submittals must include code footprint submission.
- 2.3 The code footprint submittal process is as follows:
  - 2.3.1 Each code footprint submitted must be accompanied by a Request for DFM Review form. The form is available on Facilities Planning web site (http://www.da.ks.gov/fp/).
  - 2.3.2 The project architect/engineer is to complete the first page of the Request for DFM Review form in its entirety. On the second page of the Request for DFM Review, the project architect/engineer shall complete the Compliance Attestation by identifying each item using an "x" to signify compliance and "NA" for those items that do not apply. Code footprints will not be reviewed if forms are not provided.
  - 2.3.3 The code footprint shall be submitted in 11"x17" format and may be multiple pages. The pages are to be numbered x of y.
  - 2.3.4 In progress code footprint submittals do not require agency signature and can be forwarded electronically to the Code Compliance Coordinator and copied to the Planning Coordinator.
  - 2.3.5 Final acceptance submittal shall include four (4) copies of the code footprint along with the Request for Review form. Signature lines shall be included on the front page for the Agency representative, DFM and KSFM. The Agency representative is to sign the final code footprint prior to submission to DFM.
  - 2.3.6 The submission is to be in black and white format only. Color submissions will not be reviewed and will be returned.
  - 2.3.7 Text shall be readable and legible. All graphics shall conform to the standard included at the end of this chapter and as provided on DFM web site.
  - 2.3.8 Each facility is to be identified by building number.
  - 2.3.9 Existing conditions shall be identified and shall note if the existing condition is non-conforming.
  - 2.3.10 Alternative materials, design and methods of construction and equipment should be reviewed with DFM prior to the submittal of the code footprint. Each alternative material, design or method of construction is to be identified and justified on the code footprint. See Chapter 1 of the International Building Code for definition of alternative materials, design and methods of construction and equipment.
  - 2.3.11 Temporary exiting measures shall be identified. Note: Existing exits cannot be blocked or impaired during construction. If existing exits are blocked or impaired, temporary exiting measures will be required.

- 2.3.12 The KSFMO has determined that construction areas are hazardous and as such are to be separated from occupied portions of existing buildings with one-hour fire-resistive barriers.
- 2.3.13 Identification of active life safety systems shall be listed as "required / not required" and "provided / not provided" or listed as existing non-conforming.
- 2.3.14 In-progress submittals shall be noted as "draft" or "for review only".
- 2.3.15 Code footprints will be reviewed in the order they are submitted.
- 2.3.16 After review of the "draft" or "for review only" submittal, DFM will issue comments. It is the responsibility of the project architect/engineer to address the comments issued by DFM.
- 2.3.17 Final code footprints shall have the project architect/engineer's seal affixed to the document.
- When the final code footprint is accepted, a Project Acceptance Record will be issued. The four (4) copies of the accepted code footprint will be distributed as follows: one to the agency, one to KSFMO, one to the project architect/engineer and one retained in DFM files.
- 3.0 Fire Alarm and/or Sprinkler Shop Drawings
  - 3.1 Submittals are to be reviewed and approved by the project architect/engineer prior to submittal to DFM.
  - 3.2 When the shop drawings are approved by the architect/engineer, they will forward one copy of the shop drawings to DFM for review and acceptance.
  - 3.3 A Request for DFM Review form shall accompany the shop drawings. The form is available on Facilities Planning web site (http://www.da.ks.gov/fp/). Shop Drawings will not be reviewed if form is not provided.
  - 3.4 DFM will issue a Project Acceptance Record when the shop drawings are accepted by DFM.
  - 3.5 Project architect/engineer is to forward DFM acceptance to contractor.
  - 3.6 Installation of the systems shall not begin until DFM Project Acceptance Record has been issued.
- 4.0 Certificate of (Partial) Occupancy and Required DFM Code Inspections
  - 4.1 It is the responsibility of the project architect/engineer to contact DFM and schedule inspections for DFM's determination of occupancy. [K.S.A. 75-3783]
  - 4.2 DFM performs required code inspections during construction for the Secretary of Administration and on behalf of the KSFMO. These inspections are required for Certificate of (Partial) Occupancy.
  - 4.3 It is the responsibility of project architect/engineer and/or agency to contact DFM inspectors to schedule inspection for DFM's determination of occupancy. (K.S.A. 75-3783)

- 4.4 DFM inspector shall be scheduled for the following required code inspections (if component is included in the project):
  - 4.4.1 Footings and Foundations
  - 4.4.2 Underfloor / Underslab
  - 4.4.3 MEP Underground (not associated with underfloor / underslab)
  - 4.4.4 Framing
  - 4.4.5 In-wall
  - 4.4.6 Fire-resistive assemblies and fire-resistant penetrations
  - 4.4.7 Above ceiling
  - 4.4.8 Fire Alarm
  - 4.4.9 Sprinkler and standpipe
  - 4.4.10 Emergency lighting
  - 4.4.11 Back-up Power Sources
  - 4.4.12 Fire Pump
  - 4.4.13 Elevator (witness the load testing and verify ADAAG)
  - 4.4.14 Roof inspections, including tear-off, insulation, membrane placement, flashing
  - 4.4.15 Emergency Power
  - 4.4.16 Smoke Control Systems\
  - 4.4.17 Pressure testing of Piping
  - 4.4.18 Locking systems
  - 4.4.19 Final inspections (including exit path and ADAAG verification.)
- 4.5 The required code inspections listed above shall be coordinated with DFM inspector via individual cell telephones. Telephone contact is to be a minimum of 3 work days prior to anticipated inspection. DFM inspectors do not have continual assess to e-mail and therefore, e-mail contact does not constitute timely contact. Inspection confirmation may occur via e-mail.
- 4.6 If the DFM inspector has available time within his work schedule, the inspection may not be subject to the minimum 3 work days.
- 4.7 It shall be the responsibility of the architect/engineer or agency to assure the minimum 3 work day notice is being maintained.
- 4.8 DFM inspectors can defer code inspections as follows:
  - 4.8.1 DFM inspector to review installation and set standard by which installation will be inspected. First inspection of a component is to be completed by DFM inspector.
  - 4.8.2 Agency, Contractor or Project AE is to contact DFM inspector for all required code inspections.
  - 4.8.3 Inspector will indicate availability to make an inspection. Inspector will determine if he, other DFM employee, consulting AE or agency can perform inspection. Inspector will inform Contractor and agency representative regarding who will be performing inspection.
  - 4.8.4 If agency or AE personnel perform inspection, the installation will be documented with pictures. Personnel performing inspection shall forward pictures to DFM Code Compliance Coordinator along with a written record of inspection.
- 4.9 DFM representative will not defer and shall be present at the following code required inspections: fire alarm system, sprinkler system, fire pump, standpipes, back-up power sources, emergency lighting, ADAAG and Final Inspection.
- 4.10 When DFM personnel have determined life safety systems are compliant, a Certificate of (Partial) Occupancy will be issued by DFM Code Compliance Coordinator or designee.

### 5.0 Accessibility Laws and Guidelines

- 5.1 All buildings on state owned property are subject to federal [28 CFR Part 35] and state accessibility laws, K.S.A. 58-1301 et seq, which mirror title II of the Americans with Disabilities Act (ADA).
- 5.2 Americans with Disabilities Act Accessibility Guidelines (ADAAG), 1991 governs all state building construction and renovation projects. When an agency receives federal funds for any of its programs including construction/renovation of the project, the use of the Uniform Federal Accessibility Standards (UFAS) also governs. When this occurs, the most stringent requirement will apply to the project.
- The project architect/engineer is responsible for compliance with ADAAG on all new construction, additions and renovation projects. DFM and the state ADA coordinator will review all projects for compliance with ADAAG and title II during all phases of a project. [K.S.A. 58-1304]
- Prior to the approval of design development, the project architect/engineer shall analyze renovation projects for accessibility. When alterations to a primary function area are being made, the project architect/engineer is responsible to identify what path of travel requirements are triggered. A form is provided in the Appendix on the DFM website for the project architect/engineer's use to identify and notify DFM what elements will be made accessible.
- 5.5 Failure to provide complaint accessibility items in documents in all new construction, additions and renovation projects will result in denial of release to bidders or permit to build.
- 5.6 Any ADAAG, UFAS or Title II issues, including program accessibility, will be resolved by the state ADA coordinator.
- 5.7 The following is a list of accessibility elements commonly omitted on projects. This list is provided for the benefit of the project architect/engineer. This list is not all inclusive and does not relieve the project architect/engineer from the burden of complying with ADAAG.
  - 5.7.1 Multistory governmental facilities are required to have at least one passenger elevator. Single story buildings with a code compliant mezzanine are not considered multistory facilities.
  - 5.7.2 Path of travel requirements are triggered when alterations are being made to a primary function area of a facility, and up to 20% of the construction budget is required to make alterations to meet path of travel requirements.
  - 5.7.3 Accessibility improvements that are required to make a facility accessible to individuals with disabilities shall be provided in the base bid contract, except when the project is limited solely to accessibility improvements.
  - 5.7.4 Dispersion of accessible seating in assembly areas with > 50 occupants.
  - 5.7.5 Parking and drop off areas.
  - 5.7.6 Exterior accessible routes.
  - 5.7.7 Required number of accessible entrances and exits.
  - 5.7.8 Door opening forces.
  - 5.7.9 Control mechanisms, operable by the public, such as automatic door openers, elevator hall call buttons, door handles, light switches, etc. should be no higher than 38".

- 5.7.10 Reception counters.
- 5.7.11 Areas of rescue assistance requirements.
- 5.7.12 Fire alarm requirements.
- 6.0 Graphic Standards for Code Footprints
  - 6.1 The project architect/engineer shall use the graphic standard included at the end of this chapter.
  - 6.2 The graphic standard legend contains symbols for the most common items shown on the code footprint.
  - 6.3 If additional graphic symbols are needed to adequately present the building conditions on the code footprint, the project architect/engineer may add symbols to this list. Any additions must be shown on the symbol legend on the code footprint.

**END OF CHAPTER 7** 

SYNBOL LEGEND	DESCRIPTION	PROTECTIVE ELEMENTS
- ATTION OF THE PERSON OF THE	EXIT - EXTERIOR	TRAITERITY ELECTRISTS
<u> </u>	en enem	
<b>→</b> ‡	EXIT - INTERIER (assembly occupancies over 50 - IBC)	
•	FIRE EXTINGUISHER	
-	HOSE CABINET	
	HOSE CARRET WITH EXTRIGUISHER	
	FIRE EXTINGUISHER SPACING (SHOW RAIDLS)	
	NON-PROTECTED EXIT PATH	NOVE
	LINITED PROTECTED EXIT PATH	ALITOMATIC SMOKE DETECTION THROUGHOUT EXIT PATH
	PROTECTED EXIT PATH	1 HOUR F.R. WALL CONSTRUCTION - 20 MIN. RATED DOORS ASSEMBLIES. FIRE B SMOKE DAMPERS
	SPECIAL COVERAGE	LIMITED SPRINKLER COVERAGE
1 1	1 HOUR EXIT PASSAGEWAY	1 HOUR F.R. WALL CONSTRUCTION, NO OPENINGS OTHER THAN REQUIRED EXIT DOORS, 1 HOUR DOOR ASSEMBLIES
2 2	2 HOUR EXIT PASSAGEWAY	2 HOUR FR. WALL CONSTRUCTION NO OPENINGS OTHER THAN REQUIRED EXIT NOORS, 1 1/2 HOUR BOOR ASSEMBLIES
1 1	1 HOUR EXIT ENCLOSURE (STAIRWELL - 3 STORIES)	NO OPENINGS OTHER THAN REQUIRED EXIT DOORS. 1 HOUR DOOR ASSEMBLIES
	2 HOUR EXIT ENCLOSURE (STAIRWELL - 4 STORIES OR MORE)	NO OPENINGS OTHER THAN REQUIRED EXIT DOORS, 1 1/2 HOUR DOOR ASSEMBLIES
	1 HOUR SEPARATION (Occupancy separation)	1 HOUR F.R. WALL CONSTRUCTION 1 HOUR RATED DOOR ASSEMBLIES FIRE & SNOKE DAMPERS
	2 HOUR SEPARATION (Occupancy separation)	2 HOUR FR. WALL CONSTRUCTION 1 1/2 HOUR RATED DOOR ASSEMBLIES FIRE & SNIKE DAMPERS
	3 HOUR SEPARATION (Occupancy separation)	3 HOUR FR. WALL CONSTRUCTION 3 HOUR RATED DICER ASSEMBLIES FIRE & SHOKE DAMPERS
	4 HOUR SEPARATION (Occupancy separation)	4 HOUR F.R. WALL CONSTRUCTION NO OPENINGS
198/39.6 <b>′</b> 68 <b>′</b>	ACCUMULATED EXIT WIDTH AT REQUIRED EXIT (CLEAR WIDTH)	OCCUPANTS / REQUIRED VIDTH PROVIDED VIDTH
*	PUBLIC FIRE HYDRANT (SHOW DISTANCE FROM BUILDING)	
CONF./A4 65	ROOM JESIGNATION - ASSEMBLY OCCUPANCY ONLY (OVER 50 MUST BE POSTED)	PODM TYPE / DOCUPANCY TYPE MAX ALLOWABLE DCCUPANTS
<sup>140</sup> + − − 80 >	SHOW ACCUMULATED DOCUMENT LOADS FOR COMPLEX EXIT PATHS WHEN APPLICABLED	

# **END OF CHAPTER 7**